UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/927,985	08/10/2001	Mark A. Carlson	P5445	5982

21127 7590 03/07/2005		EXAMINER
KUDIRKA & JOBSE, LLP		BATES, KEVIN T
ONE STATE STREET		

ART UNIT	PAPER NUMBER
2155	

SUITE 800
BOSTON, MA 02109

DATE MAILED: 03/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _10 August 2001_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-69_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-69_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _10-10-02,1-26-04_.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____ .

DETAILED ACTION

This Office Action is in response to a communication made on August 10, 2001.

The Information Disclosure Statements were received on October 10, 2002 and

January 26, 2004.

The Power of Attorney was received on March 11, 2004.

Claims 1-69 are pending in this application.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public
use or on sale in this country, more than one year prior to the date of application for patent in the United
States.

Claims 1-69 are rejected under 35 U.S.C. 102(b) as being anticipated by Wolff

(6067545).

Regarding claims 1, 25, 32, 41, and 65, Wolff discloses a method for managing

multiple resources in a system (Column 2, lines 37 – 41), comprising: receiving a user

request for an operation that requires performing separate element operations with

respect to multiple resources in the system (Column 6, lines 10 – 14; 55 – 64); in

response to the user request (Column 6, lines 18 – 30), communicating commands to

multiple elements, wherein each element is capable of managing one of the resources

in the system (Column 6, lines 35 – 46); for each element receiving at least one of the

communicated commands (Column 7, lines 18 – 22), performing: (i) interpreting the

received command (Column 13, lines 9 – 16); (ii) performing the element operation

requested by the received command with respect to the managed resource (Column

13, lines 9 – 16), wherein all the element operations performed by all the elements in

response to receiving the commands implement the user requested operation (Column

6, lines 35 – 46).

Regarding claims 2, 26, 33, 42, and 66, Wolff discloses that the user requested

operation comprises a request to allocate at least one resource in the system to a host

in the system, and wherein the element operations requested by the received

command comprise configuration operations to configure the managed resources to

implement the user requested resource allocation (Column 6, lines 56 – 64).

Regarding claims 9, 40, and 49, Wolff discloses that the commands are

communicated by using element proxy objects registered with a lookup service

(Column 6, lines 35 – 46).

Regarding claim 31, Wolff discloses that there are multiple management

programs (Column 6, lines 35 – 38), wherein each management program calls one of

the multiple elements for each resource to control, and wherein different management

programs call different elements for at least one resource to perform different

operations with respect to the resource (Column 6, lines 39 – 46).

Regarding claim 69, Wolff discloses that the manager object and element objects

comprise proxy objects, further comprising: a lookup service (Column 6, lines 35 – 37)

including registered instances of the manager proxy objects and element proxy objects,

wherein the manager and element proxy objects include code enabling access to the

operations performed by the proxy objects (Column 16, lines 39 – 63).

Regarding claims 10 and 50, Wolff discloses a method for managing multiple

resources in a system (Column 2, lines 37 – 41), comprising: registering a

configuration service proxy object with a lookup service (Column 6, lines 35 – 38),

wherein the configuration service proxy object includes code enabling access to a

configuration service capable of configuring resources in the system (Column 9, lines

35 – 44); registering configuration element proxy objects with the lookup service

(Column 6, lines 35 – 46), wherein the configuration element proxy objects include

code enabling access to element configurations that are capable of configuring system

resources (Column 6, lines 35 – 46); using the code in the configuration proxy object

to communicate a user request (Column 6, lines 10 – 14; 55 – 64) for a configuration

operation with respect to at least one system resource to the configuration service;

and using, with the configuration service, the code in the configuration element proxy

objects to communicate commands to the configuration elements to implement the

requested configuration operations (Column 13, lines 9 – 16); and in response to

receiving the commands from the configuration service, performing, with the

configuration elements, a configuration operation on the resource indicated in the

received commands (Column 6, lines 35 – 46).

Regarding claims 11 and 51, Wolff discloses that the configuration operations

performed by all the configuration elements in response to receiving commands from

the configuration service implement the user requested configuration operation

(Column 6, lines 10 – 14; 55 – 64).

Regarding claims 12 and 52, Wolff discloses that the user requested

configuration operation comprises a request to allocate a resource in the system to a

host in the system, and wherein the configuration operations performed by the

configuration elements receiving the commands from the configuration service

implement the user requested resource allocation (Column 6, lines 55 – 60).

Regarding claims 3, 13, 27, 34, 43, and 53, Wolff discloses that the request to

allocate the at least one system resource comprises a request to allocate additional

storage space in the system to the host (Column 6, lines 56 – 64).

Regarding claims 4, 14, 28, 35, 44, and 54, Wolff discloses that the request to

allocate the at least one system resource includes a request to allocate the storage

space to a logical volume in the host, wherein the resources managed by the elements

comprise a storage device, a switch, a host adaptor, file system, and a volume

manager (Column 2, lines 37 – 41), wherein the element managing the storage device

allocates the storage space to the host (Column 6, lines 56 – 64), wherein the element

managing the switch is capable of allocating at least one path in the switch to the

storage device to allow the host to access the allocated storage space (Column 5, lines

42 – 45), wherein the element managing the host adaptors allocates at least one host

adaptor in the host to communicate with the switch to access the allocated storage

space, and wherein the element managing the volume manager assigns the allocated

storage space in the device to the requested logical volume used by the host (Column

7, lines 5 – 13).

Regarding claims 5, 15, 29, 36, 45, and 55, Wolff discloses that the system is

capable of including multiple storage devices, switches, and host adaptors in the host,

and wherein there is at least one separate element to manage each storage device

and switch in the system (Column 6, lines 35 – 46).

Regarding claims 6, 16, 37, 46, and 56, Wolff discloses that in response to the communicated commands, determining, with the elements, at least one switch and storage device in the system capable of supplying the storage and path resources to satisfy the user request, wherein the commands are communicated to the elements managing the determined switches and storage devices (Column 6, lines 35 – 46).

Regarding claims 7, 22, 30, 38, 47, 62, and 67, Wolff discloses that each resource in the system is capable of being managed by multiple elements, wherein each of multiple elements for one resource performs the element operation in a different manner than other elements (Column 5, line 65 – Column 6, line 5).

Regarding claims 8, 23, 39, 48, 63, and 68, Wolff discloses that there is an application program interface (API) set for each resource in the system, wherein the multiple element objects capable of managing one resource call the same API set to perform operations with respect to the managed resource (Column 56, lines 1 – 6).

Regarding claims 17 and 57, Wolff discloses that the configuration elements query information on the system components to determine the system components capable of satisfying the user requested configuration operation (Column 10, lines 26 – 39).

Regarding claims 18 and 58, Wolff discloses that the configuration policy parameters are provided with each configuration element that specify how each configuration element configure the associated switch, storage device, or host adaptor (Column 9, lines 47 – 50).

Regarding claims 19 and 59, Wolff discloses that the configuration policy

parameters specify a level of availability to provide with the allocated storage space

(Column 11, lines 42 – 57).

Regarding claims 20 and 60, Wolff discloses that there are multiple configuration

services calling different sets of elements to provide different qualities of

configurations, further comprising: selecting one of the configuration services (Column

61, lines 1 – 56).

Regarding claims 21 and 61, Wolff discloses that the system is further capable of

including backup programs and snapshot image programs, wherein there is at least

one configuration element to manage each backup program and snapshot image

program in each host (Column 10, lines 13 – 23).

Regarding claims 24 and 64, Wolff discloses that the configuration service proxy

object enables either remote or local access to the configuration service to configure

capable of configuring resources in the system (Column 10, lines 13 – 23).

Prior Art

The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

U. S. Patent No. 6425005 issued to Dugan, because it discloses a resource

management system with network elements.

U. S. Patent No. 6658626 issued to Nguyen, because it discloses storage

resources with many managing elements.

U. S. Patent No. 5771388 issued to Mondrik, because it discloses multiple resources being mapped to managing elements.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Bates whose telephone number is (571) 272-3980. The examiner can normally be reached on 8 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on (571) 272-3978. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KB

KB
February 25, 2005

**BHARAT BAROT
PRIMARY EXAMINER**